FILE COPY

FI
DEC 1
CHARLES E

Nos. 316, 317 and 318.

IN THE

Supreme Court of the United States

OCTOBER TERM, 1932.

THE UNITED STATES OF AMERICA,
Petitioner,

v.

DUBILIER CONDENSER CORPORATION.

THE UNITED STATES OF AMERICA,
Petitioner,

v.

DUBILIER CONDENSER CORPORATION.

THE UNITED STATES OF AMERICA,
Petitioner,

v.

DUBILIER CONDENSER CORPORATION.

On Writs of Certiorari to the United States Circuit Court of Appeals for the Third Circuit.

BRIEF FOR THE DUBILIER CONDENSER CORPORATION.

INDEX.

	Page
Opinions Below	2
Question Presented	2
Statement:	
A. The Facts as Found by the Trial Court and Concurred in by the Circuit Court of Appeals	3
(a) Air Corps Projects	5
(b) The Alternating Current Receiving Set (Patent 1,455,141, R. II, 10)	9
(c) The Negative Grid Bias Patent (Patent 1,635,117, R. II, 1)	10
(d) The Loud Speaker Patent (Patent 1,606,-212, R. II, 18)	11
(e) The Inventions in Suit Did Not Result From Specific Tasks Assigned to the Inventors	12
(f) The Development	13
B. Pleadings	13
The Petitioner's Contention	17
Argument:	
I. This Case Is an Attempt to Spell Out a Contract to Assign Patents Which a Court of Equity Is Asked to Enforce	22
II. The Equities	42
III. The Government's Argument of Public Policy	44
Conclusion	46

CITATIONS.

PAGE

CASES:

Aspinwall Co. v. Gill, 32 Fed. 697 42
Colson v. Thompson, 2 Wheat. 336 41
Dalzell v. Dueber Mfg. Co., 149 U. S. 315 .....23, 32
34, 38, 42
Gill v. United States, 160 U. S. 426 44
Hapgood v. Hewitt, 119 U. S. 226 .....23, 29, 34, 36, 38
Hildreth v. Duff, 143 Fed. 139 39
Ingle v. Landis Tool Company, 272 Fed. 464 .....35, 38
Pressed Steel Car Co. v. Hansen, 128 Fed. 444..23, 37, 38
Solomons v. United States, 137 U. S. 342 44
Standard Parts Co. v. Peck, 264 U. S 52 34
Westinghouse Air-Brake Co. v. Chicago Brake & Mfg. Co., 85 Fed. 786 42
Whiting v. Graves, 3 Ban. & A. 222; 29 Fed. Cas. 1059 39
Withington-Cooley Mfg. Co. v. Kinney, 68 Fed. 500 39

STATUTES:

Act of March 3, 1883, c. 143, 22 Stat. 603, 625 .....21, 44
Act of March 3, 1901, c. 872, Sec. 2, 31 Stat. 1449, 15 U. S. C. A., Sec. 272 40
Act of March 3, 1921, 41 Stat. 682, 41 Stat. 1302 ... 40
Act of April 30, 1928, c. 460, 45 Stat. 467, 468 .....21, 45

IN THE

Supreme Court of the United States.

October Term, 1932.

No. 316.

THE UNITED STATES OF AMERICA,

Petitioner,

v.

DUBILIER CONDENSER CORPORATION.

No. 317.

THE UNITED STATES OF AMERICA,

Petitioner,

v.

DUBILIER CONDENSER CORPORATION.

No. 318.

THE UNITED STATES OF AMERICA,

Petitioner,

v.

DUBILIER CONDENSER CORPORATION.

ON WRITS OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE THIRD CIRCUIT.

BRIEF FOR RESPONDENT.

OPINIONS BELOW.

These cases are before the Supreme Court of the United States for review of the judgments of the Circuit Court of Appeals for the Third Circuit, entered May 24, 1932, reported 59 F. (2d) 381, affirming judgments of the District Court for the District of Delaware, entered April 27, 1931, reported in 49 F. (2d) 306, dismissing the Bills of Complaint brought to secure an assignment to the United States of three patents.

QUESTION PRESENTED.

Whether an implied contract to assign complete title to an invention arises from the fact that an employee of the Bureau of Standards, the business of which is concerned with the establishment of standards, and which is not engaged in the manufacture and sale of any apparatus, and not shown to have any governmental interest in the acquisition or exploitation of exclusive patent rights, engaged under general employment as Assistant Physicist, devoting about half of his time to testing and the other half to the general research of the Bureau, makes an invention relating to alternating current operated household radio-receiving apparatus, although not employed to make inventions, not assigned to work requiring the making of inventions, not specially assigned or directed to devise the particular invention and not advised that the Government had any interest in the ownership of inventions relating to his employment or to any work upon which he was engaged, or to the subject matter of his invention.

STATEMENT.

A. THE FACTS AS FOUND BY THE TRIAL COURT AND CONCURRED IN BY THE CIRCUIT COURT OF APPEALS.

B. PLEADINGS.

A. THE FACTS AS FOUND BY THE TRIAL COURT AND CONCURRED IN BY THE CIRCUIT COURT OF APPEALS.

The following facts were found by the Trial Court and by the Court of Appeals, or clearly appear from the record:

The Bureau of Standards is a sub-division of the Department of Commerce of the United States. Its functions consist in the custody of standards; the comparison of the standards used in scientific investigations, engineering, manufacturing, commerce, and educational institutions with the standards adopted or recognized by the Government; the construction of standards, their multiples and subdivisions; the testing and calibration of standard measuring apparatus; the solution of problems which arise in connection with standards; and the determination of physical constants and the property of materials. In addition the Bureau of Standards, during the years hereinafter referred to, was charged by Congress with the duty of investigation and standardization of methods and instruments employed in radio communication for which work Congress made special appropriation. (R. 220.)* In recent years the Bu-

*Petitioner's method of referring to pages in the Record has been adopted by the Respondent. (See footnote on page 3, Petitioner's Brief.)

reau of Standards to some extent has been engaged in research and testing work of various kinds for the benefit of private industries, other departments of the Government, and the general public.

At the time in question the Bureau of Standards was divided into divisions, each charged with a specified field of activity. One of such divisions was the Electrical Division. The various divisions were further sub-divided into sections. One of the sections of the Electrical Division was the Radio Section. The Radio Section was further subdivided into distinct groups. The work of each group was specifically delineated in administrative outlines of the Bureau. (R. 221.)

In the years 1921 and 1922 Francis W. Dunmore and Percival D. Lowell, the inventors to whom were granted the patents in suit, were employed as assistant physicists in the Radio Section of the Bureau of Standards. Dunmore was chief of the group of the Radio Section having to do with "airplane radio". Lowell was a member of this group. (R. 221.)

In May, 1921, the Air Corps of the Army and the Bureau of Standards entered into an arrangement whereby the latter undertook the prosecution of certain radio projects for the benefit of the Air Corps, the Air Corps transferring the necessary funds for the projects to the Bureau of Standards.

Projects 38 and 42 related to the use of radio in connection with aircraft. Project 38 was styled a "visual indicater for radio signals" and suggested the redesign of what was known as an Eckhardt recorder. Project 42 was styled an "airship bomb control and marine torpedo control by radio". Each of the projects required the design of a radio relay for use on an airplane to receive the output from a radio receiver and to relay it to a coil on the plane which

would operate either a visual indicator or a trigger; such use required operation of both the receiver and the relay by direct current batteries. The relay required was to operate at a specified frequency upon a specified current. (R. 222.)

In the Summer of 1921, Dunmore, chief of the group to which "airplane radio" problems were allocated, without instructions or suggestions from his superiors, picked out for himself the above relay projects. There was no question in the projects of the operation of the relay by alternating current; a relay so operated was not desired and in fact would have been impracticable and useless for airplane service (R. 206, 222) for the reason that airplanes did not have a supply of alternating current. (R. 118.) A relay which satisfactorily solved the above described projects was completed by Dunmore in September, 1921.

Meanwhile Lowell and Dunmore, impelled solely by their own scientific curiosity, and in no connection with the airplane relay or other assigned problems or projects, but moving outside the scope of the particular work to which they had been assigned, directed their minds to the problem of substituting house lighting alternating current for direct battery current in radio apparatus. (R. 223; II, 463.)

(a) *Air Corps Projects.*

The so-called "problems" upon which the Government bases its contention of "assignment" are designated in the record as Projects 38 and 42 appearing in Plaintiff's [1] Exhibit 18 (R. II, 82). These projects were among a list of forty-four items which the Bureau of Standards carried on for the Air Service of the Army (R. 45), for which purpose the War Department transferred to the Bureau $3500 for Project 38, and $2500 for Project 42 (R. II, 77).

[1] The petitioner was the original plaintiff, the respondent the original defendant.

Project 38 was

"38. Visual indicator for radio signals:

". . .

"Construct modification of Eckhardt recorder."

Project 42 was

"42. Airship bomb control and marine torpedo control:

"Devise secret signaling system to use with Air Service selector.

"Inspect Hammond receiving set.

"Seek relay to operate from 10 to 12 times per second on 500 microamperes."

The accompanying diagram will indicate the general nature of the two projects. The airplane was intended to carry a radio receiver of the ordinary type, and it was desired that the signal output from the receiver should cause the operation of a visual indicator (project 38) or a trigger (project 42) to release a bomb. Since the output of the receiver did not have power enough to do this, a relay was desired to amplify the output and deliver amplified power sufficient to operate the trigger or indicator. (Dunmore, R. 150.) Project 42 further required operation "from 10 to 12 times per second on 500 microamperes" of current.

Dunmore, in meeting the requirements of these projects, used "substantially the same apparatus as Mr. Eckhardt used" (R. 151).

The Eckhardt apparatus (described in Defendants' Exhibit 2, R. II, 426) comprised a vacuum tube amplifier with a mechanical relay.

The project did not call for invention but for design, *i. e.* suitable redesign and proportioning of the Eckhardt apparatus to cause it to operate at the proper rate and power. As Col. Mauborgne of the Air Service testified (R. 189):

FOLDOUT(S) IS/ARE TOO LARGE TO BE FILMED

"It was not a question of invention, but merely a question of engineering. . . . It was a designing problem."

Moreover, neither project called for nor suggested the use of alternating current in any way. The airplane already carried A batteries and B batteries for the radio receiver which, in any event, could not be dispensed with because the power source on an airplane must be available when the airplane is on the ground and the engine not running, thus requiring storage batteries furnishing only direct current (Mauborgne, R. 190; McMullen, R. 206; Dunmore, R. 151; Dellinger, R. 117).

The Dunmore redesigned Eckhardt relay, known in the record as "Type A", was operated by direct current batteries, as was the case with Eckhardt, and with such batteries satisfactorily met the requirements of the projects (Dellinger, R. 118; Mauborgne, R. 190).

Petitioner's witness, Dr. Dellinger, admits that the "A" relay solved the airplane bombing control problem". (R. 119.)

Dunmore's time card entry of November 23, 1921, shows that the relay was operated then for demonstration (R. II, 119, Ex. 24). Hence the project was completed before that date.

(b) *The Alternating Current Receiving Set.*
(Patent 1,455,141, Vol. II, p. 10.)

On their own initiative and without any direction or even suggestion on the part of the Bureau, Lowell and Dunmore became interested in the problem of a radio receiving apparatus adapted to operate from ordinary household current without the use of the direct current batteries then required to furnish current for the three-element vacuum

tubes in the set, the A battery for filament current, the B battery for plate current and the C battery for grid bias.

The difficulty in the way of such operation was that the alternating rise and fall in value of such current in the several tube circuits caused a humming noise which was highly objectionable in a household radio receiver, and the problem was to find a way to avoid such hum notwithstanding the current alternations.

No such problem existed in connection with the "projects" because either a visual indicator or a mechanical bomb trip was to be operated, and moreover in such devices the hum due to alternating current would not have been objectionable even if distinguishable from the engine noise.

After the Air Service projects had been completed in November, 1921 (R. II, 119) the receiver invention was completed on December 10, 1921. (Dunmore, R. 152.) Dunmore kept the records of the invention while Lowell worked jointly with him. There are two records showing the completion of the invention. The first is the entry in Dunmore's notebook under date of December 10, 1921, page 49 (Plaintiff's Exhibit 26, R. II, 230), in which a complete wiring diagram of the alternating current operated receiving set was drawn out. The other record is Dunmore's time card for December 10, 1921 (Plaintiff's Exhibit 24, R. II, 121).

(c) *The Negative Grid Bias Patent.*

(Patent 1,635,117, R. II, 1.)

The difficulty of alternating current operation was peculiarly acute in its application to the grid circuit, the most sensitive part of the tube, since any change in voltage

applied to the grid circuit was repeated many times amplified in power in the plate circuit.

Here again no similar problem existed in airplane apparatus.

The invention was conceived by Dunmore on December 3, 1921 (R. 155) and completed on December 16, 1921 (R. 156; R. II, 232).

After making the invention a power supply unit embodying the invention was connected on to the "Type A" unit previously made, in substitution for the batteries and the "Type A" relay was so operated (R. II, 169), but beyond the fact that the tube in the "Type A" relay, as in the case of any other three-element vacuum tube, could be operated by the invention there was no connection between the invention and the project.

(d) *The Loud Speaker Patent.*

(Patent 1,606,212, R. II, 18.)

This patent related to the operation by alternating current of the loud speaker usually accompanying a household radio receiver.

Aside from the fact that the airplane carried no alternating current to operate a power speaker it could not have been heard if operated on an airplane because of the noise of the engine; moreover the project called for a *visual* indicator, or *mechanical* trip.

The invention was jointly conceived on January 10, 1922 and completed on January 25, 1922 (R. 157, 158).

(e) *The Inventions in Suit Did Not Result From Specific Tasks Assigned to the Inventors.*

These projects were never specifically assigned to either Lowell or Dunmore. They were received in July, 1921 (R. 111) during the absence of Dr. Dellinger, and the alternate chief Mr. Whittemore, who was in charge of the Radio Section, could not remember any discussion of the projects with the inventors (R. 112). Neither could Dr. Dellinger (R. 120). Dunmore, however, saw the list and without instructions worked on project 42 (R. 105).

The petitioner's brief at the bottom of page 7 states that while Dunmore was engaged in his work on the Air Service relay project "a number of possible additional applications for the relay suggested themselves, for which the supply of power by alternating current rather than by direct current appeared more desirable, and in discussions between Mr. Dunmore and his superiors it was agreed that this feature of the work should be prosecuted." None of the references following this statement support it and, in fact, there is nothing in the record to justify such a statement. Actually the testimony is quite to the contrary effect. (R. 118, 112, 154, 194.)

Both of the Courts below held that there was no assignment (R. 223; R. II, 468), and Petitioner's brief, page 2, apparently accepts this finding of fact. In fact all of the inventions were made after the Air Service Projects were completed, and, as stated by the District Court (R. 223):

> "This project was not involved or even suggested by the problems with which the radio section was then dealing and was not assigned by Dr. Dellinger or by any other superior as a task to be solved by either of these employees. It was a project independent of their work and was voluntarily assumed."

(f) *The development.*

After the inventions were completed (R. 224) they came to the attention of Dr. Dellinger, who being interested, authorized the making of a receiver embodying the inventions, and the preparation of a publication describing them.

The Bureau itself did not even use the inventions. The only evidence of any interest on the part of the Government was the making of two relays for experimental use by the Air Corps (R. 192) and two for the Navy (R. 192).

Indeed it was not until the Respondent had spent upwards of $300,000 in development and $70,000 in patent litigation (R. 199) and after the District Court had sustained the two patents in *Dubilier Condenser Corporation, et al. v. Radio Corporation of America* (34 F. (2d) 450), that this suit was brought. In the meantime the Government gave no help to the inventors in costly interference proceedings in the Patent Office, nor to the Respondent and the inventors in costly effort to sustain the patents in Court.

B. PLEADINGS.

The Government brief, as we understand it, raises no new question of law, but is confined to one question of fact, *i. e.*, whether or not the inventors agreed by implication to assign their inventions to the Government. (Petitioner's brief, pp. 16, 17.)

In each of the three suits the Bill of Complaint alleges title on behalf of the United States in one of three letters patent. In case No. 316, No. 4656 in the Circuit Court of Appeals, and No. 788 in the District Court, petitioner claims title to patent No. 1,455,141, granted May 15, 1923, to P. D. Lowell and F. W. Dunmore (Plaintiff's Exhibit 2, R. II, 10)

which relates to a radio receiving apparatus operating from an ordinary house lighting system in lieu of the storage and dry batteries formerly used.

In case No. 317, No. 4657 in the Circuit Court of Appeals and No. 789 in the District Court, petitioner claims title to Patent No. 1,606,212, granted November 2, 1926, to F. W. Dunmore and P. D. Lowell (Plaintiff's Exhibit 3, R. II, 18) for a power amplifier for operating by alternating current the loud speaker of a receiving set.

In case No. 318, No. 4658 in the Circuit Court of Appeals and No. 790 in the District Court, the petitioner claims title to Patent No. 1,635,117, granted to F. W. Dunmore July 5, 1927 (Plaintiff's Exhibit 1, R. II, 1), for a signal receiving system in which the negative grid bias as well as the other circuits of an electron tube are derived from household alternating current system in lieu of batteries.

The inventors granted an exclusive license to the Respondent, Dubilier Condenser Corporation, subject, however, to a non-exclusive license to the United States to use the inventions without royalty for the full term of patents (R. 11, 23, 31, 41).

Paragraph VI in the Bill (R. 5), seeking the conveyance of the patent covering the radio receiving set operated by alternating current states that:

> "In the course of his employment as aforesaid, there was assigned to the said Lowell by his superiors in said radio section, for investigation and research, the problem of developing a radio receiving set capable of operation by alternating electric current as supplied by electric power companies for residences and other buildings, so that the use of electric batteries might be eliminated in connection with radio receiving apparatus."

Paragraph VI of the Bill (R. 9), seeking conveyance of the patent embodying the invention of the alternating current loud speaker states that:

> "In the course of his employment as aforesaid, there was assigned to said Lowell by his superiors in said radio section, for investigation and research, the problem of developing an amplifier, otherwise known as a 'loud speaker,' capable of operation by alternating electric current as supplied by electric power companies for residences and other buildings."

Paragraph VI of the Bill (R. 13), seeking the conveyance of the patent embodying the invention of the alternating current relay states that:

> "In the course of his employment as aforesaid, there was assigned to said Dunmore by his superiors in said radio section, for investigation and research, the problem of developing a radio receiving system operating a relay for the local or remote control of auxiliary apparatus."

Paragraph VIII of each Bill alleges that Lowell and Dunmore solved the problem "by developing and inventing." Paragraph X of each Bill urges that the patents are in equity and good conscience the property of the United States. The Bills of Complaint do not contain any averment that Lowell and Dunmore were employed to make *inventions*, or that there was any agreement, express or implid, that any inventions made during employment should belong to the employer, or even that they were assigned to a duty of such nature that the employees were put upon notice that if inventions resulted they would belong to the employer.

The bills thus seek to find as a substitute for an express agreement, on the part of the employees to assign their inventions to their employers an implied one through an "as-

signment" by superiors to the task of "investigation and research" of "the problem of developing" radio receiving apparatus. At the trial the petitioner urged that the assignment was to *devise* apparatus for operating a radio receiving set, etc., and that the inventions in controversy were the product and result of the work of the employees "in solving radio research problems assigned to them" (R. 220).

It was found as a fact by both Courts that no such tasks had been assigned to the inventors. (R. 223; R. II, 468.) Having failed to support the averments of its bills by proof, petitioner argued the case both in the District Court and Circuit Court of Appeals upon the broad ground now urged in its brief (page 2) in this Court, that "a technical research employee" who makes inventions relating to the broad subject matter of research is obligated to transfer complete title to such inventions even though they were not assigned or directed to devise the inventions; in short, that an agreement to assign "inventions" is to be implied from the mere fact that the employment is for "research."

The District Court dismissed the three Bills of Complaint on the ground that the Government had failed to show that the inventions were made under circumstances from which a contract to assign the patents to the employer could be implied. It was conceded that there was no express contract for the assignment of the patents (R. 225).

The Circuit Court of Appeals affirmed the Trial Court, holding that in the absence of an express contract to assign patents and in the absence of a specific assignment of the employees to the task of making the inventions in question, the ownership of the inventions did not result to the employer. (R. II, 465, 466.)

THE PETITIONER'S CONTENTION.

The petitioner's brief, page 2, states that the question presented is the broad proposition whether the United States had equitable title to "inventions for the improvement of the radio art made by technical research employees of the Bureau of Standards . . . while engaged in research relating to the advancement of the radio art, which was within the scope of their general employment, although they were not specially assigned or directed to devise the particular inventions." On page 16, however, this proposition is narrowed by admitting that the title "depends principally upon the terms of the employment" and the petitioner urges that in the absence of express provision that an employee's inventions should be the property of the employer, "the law may imply such an agreement by reason of the relationship of the parties and the circumstances under which the invention is perfected." The petitioner's brief then admits that "the ultimate question before a Court is whether such an agreement may be implied in the instant case." Thus, the present position of the petitioner accepts the settled principle of law that an employee is under no obligation to assign title to an invention unless there is an agreement to that effect, express or implied. The case rests upon the question whether, in fact, there was an implied agreement.

In attempting to make out a case of an implied agreement to assign the inventions in suit, the petitioner asserts the broad proposition that "technical research employees of the Bureau of Standards . . . while engaged in research" are obligated to transfer title to their inventions "although they were not specially assigned or directed to devise the particular inventions."

The precise proposition which the petitioner seeks to have established in the instant case is found on page 17 of its brief in sub-division (b) of paragraph 3, viz:

> "Where the duties of an employee include research and invention in a specified field, and an invention perfected lies within that field but the employee was not expressly assigned to develop that particular device."

the entire property rights in the invention nevertheless belong to the employer.

It will be seen at once that the petitioner's contention at the least requires that the words "research" and "invention' be given synonymous effect. When the same proposition was urged before the Circuit Court, Judge Woolley said:

> "The juxta-position of the words 'research' and 'inventive work' throws the statement out of balance." (R. II; 465.)

The Trial Court in dealing with the same contention said:

> "To say that a person engaged in 'research' work is necessarily engaged in 'inventive work' is putting an unwarranted construction upon the word 'research' not justified by common knowledge or experience."

The petitioner throughout its brief seeks to treat the word "research" and "invention" as synonymous and apparently hopes by a constant repetition of its effort to lend validity to its attempted definition of the word "research". It is plain that by seeking the construction that a hiring for research work is tantamount to a hiring for invention, the petitioner is begging the real question involved in these suits.

Research is, of course, necessary in the fundamental work of the Bureau in establishing and maintaining standards; thus, standardization of any article or product of commerce requires diligent inquiry and examination. There can be no sound reason to give the word "research" a strained meaning. Certainly a litigant for the purpose of attempting to deprive others of their legal rights is not entitled to take a word out of its normal and accepted meaning in an effort to establish a legal right which is in derogation of the general law.

Nothing in the Acts relating to the Bureau suggests that public monies are to be spent for the making of inventions or selling them or even giving them to the public, thereby competing with private industry. Certainly if Congress had had any such intention it would have made clear provision therefor.

The research that the Bureau of Standards is obviously authorized to engage in is limited to such research as is necessary to its fundamental function, to-wit, custody, maintenance and construction of standards, and to define the word as the plaintiff here seeks to define it, is wholly unjustifiable and clearly reflects the weakness of the petitioner's case.

On page 30 of its brief, the petitioner urges that research scientists whether in government or commercial laboratories, are employed with the expectation that they will develop inventions. There is no evidence to this effect in the record, and indeed it is entirely contrary to the fact.

Even in commercial organizations, the greater part of the work done under the name "research work" consists in testing materials for the purpose of ascertaining their quality, purity, strength, etc., and in furnishing information to engineers for the purpose of enabling them

to make the most economical and practicable use of the materials with which they have to deal.

Moreover, it may be stated that practically all commercial organizations which employ men in positions where they are required to, or likely to, make inventions in the course of their employment, are required to sign written agreements covering the transfer of title to any inventions made. Petitioner's argument (p. 35) to the effect that affirmance of the decrees below would have a demoralizing effect upon and impair the usefulness of the Bureau of Standards, is, we submit, entirely without merit. On the contrary, it is easy to imagine the injustice and confusion that would result from the holding that an employee of a "technical research" organization is obligated to transfer patents for his inventions to the organization without being put upon notice prior to or at the time of the invention that such transfer was required as a condition of employment. Especially would this be so where the organization is outwardly engaged in the kind of research which does not require invention.

Petitioner's brief urges, page 37, that invariably patents on inventions emanating from commercial laboratories become the property of the employer. There is no evidence of this in the record, and we respectfully challenge the correctness of the statement. As above stated, it is the general rule of commercial laboratories and organizations to require written agreements before employing men in positions where they may make inventions.

Petitioner points out that the practice of private corporations in requiring contracts for the assignment of patents has not had the effect of crushing or hampering men of genius. It is, however, well known that salaries paid skilled physicists and chemists by private enterprise

encourage the best endeavors of such employees, and even with these larger emoluments the almost invariable practice is to require written agreements on the part of the employee. The Government's practice, as indicated in the Act of March 3, 1883, and amended by the Act of April 30, 1928,[1] recognizes that the Government cannot be expected to pay as large salaries, and in a measure makes up for such lack of salary by recognizing the right of the employee to his own inventions outside of Government use.

In the last analysis the Government's brief presents but one question, *i. e.*, whether or not the fact that the employees in this case were engaged in work which to some extent involved "research," raises by implication of law a contract on their part to assign to their employer any inventions which they might make during the period of their employment. The answer to the fundamental question involved must be found in the decisions of this Court in cases involving similar fact situations.

---

[1] See pp. 44 and 45, *infra*.

ARGUMENT.

I.

THIS CASE IS AN ATTEMPT TO SPELL OUT A CONTRACT TO ASSIGN PATENTS WHICH A COURT OF EQUITY IS ASKED TO ENFORCE.

These cases are not concerned with the right of an employer to use the patented inventions of its employees. They are concerned with the employer's right to exclusive ownership.

The Constitution (Art. I, Sec. 7) [1] authorizes Congress to secure for limited times to *authors and inventors* the exclusive right to their respective writings and discoveries. Pursuant to the Constitutional authorization, Section 4886 of the Revised Statutes [2] provides for the award of patents to inventors. Aside from the familiar cases of death or bankruptcy, whereby title to a completed invention, whether before or after the issuance of a patent, may be transferred, the only method by which title to a completed invention may pass is by an assignment in writing. In the case of incompleted or future inventions ownership

[1] "Congress shall have power * * * to promote the progress of science and the useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."

[2] "Any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof, not known or used by others in this country, before his invention or discovery thereof, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, or more than two years prior to his application, and not in public use or on sale in this country for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees required by law, and other due proceeding had, obtain a patent therefor."

may be transferred by a contract to assign which, in a proper case, equity will enforce. It is with this latter situation that this case deals.

Resort has frequently been had to the Courts for the enforcement of such contracts. *Hapgood v. Hewitt*, 119 U. S. 226; *Dalzell v. Dueber Mfg. Co.*, 149 U. S. 315; *Pressed Steel Car Co. v. Hansen*, 128 Fed. 444 (W. D., Penn.).

In the case last cited the Court stated the nature of a case such as the present one as follows:

> "The law applicable to this case falls within a narrow compass. The obligation of an employe to assign to an employer an invention made in the course of his employment does not arise from the existence of the relation of employe and employer alone, but there must be in addition a contract to assign. . . .
>
> "It will thus be seen that the agreement by the employe inventor to convey is the obligation which compels him to convey.
>
> "In view of this fundamental requirement it becomes our duty to inquire whether such contract is established by the proofs in this case. . . ."

The question before this court, therefore, is the determination whether or not Dunmore and Lowell were parties to an agreement with their employer, the Government, to assign to it the inventions embodied in the patents in suit.

At the outset of its effort to invoke the extraordinary equitable relief of specific performance the plaintiff is confronted with the fact that the only written conracts of employment of the inventors are found in the notifications of appointment and the notifications of promotion, and the oaths of office taken by the employees upon the acceptance of their respective appointments and promotions. (De-

fendant's Exhibits 1 and 9, R. II, 425, 444-5.) The plaintiff's principal witness, Dr. Dellinger, Chief of the Radio Section of the Bureau of Standards, admitted that there was no written contract with the inventors looking to the assignment of patents (R. 116), and the testimony of the inventors was that there was no agreement of any kind respecting patents (R. 148, 193).

The respondent does not contend that an employment contract must, in order to be enforceable in equity, be a written one. On the contrary, it is admitted that an oral agreement whose terms are clearly proved would be specifically enforceable. The record of this case, however, discloses no such agreement, nor facts from which such an agreement could be implied.

Lowell began his employment on January 29, 1913, as a laboratory apprentice, at a salary of $480 per year, and through various promotions had become, at the time when the inventions were made (1921 and 1922) assistant physicist, having passed through the grades of aid and laboratory assistant. His salary was increased at various times to $540, $600, $720, $900, $1000, $1200, $1300, $1500, $1800 and $1980, which last sum he was receiving when the inventions in suit were made. (Defendant's Exhibit 9, R. II, 444-5.) Dunmore began his employment on January 8, 1918, as laboratory assistant, at a salary of $1320 per year. Through various promotions he became assistant physicist and associate physicist, with various salary increases to $1500, $1600, $1980, $2100 and $2400, which last amount he was receiving at the time of the inventions. (Defendant's Exhibit I, R. II, p. 425.)

The superior of both of the inventors until his retirement in March, 1921, was Dr. Frederick A. Kolster. (R. 185, 186.) Kolster himself never received any instructions

from anyone in authority in the Government that the Government expected or was entitled to the ownership of any inventions he might make. On the contrary, Kolster himself, during his employment in the Bureau of Standards, took out many patents of which he retained the ownership, subject to a license in the Government . (R. 208, 210, under Rule 46.) He further testified that it was generally understood by members of the Radio Section that the Government was entitled to the use of the inventions of employees, though not to the exclusive ownership. (R. 208, 210, under Rule 46.) During Kolster's administration he encouraged the members of the Section to take out patents in their own names, reserving a license to the Government. (R. 210, under Rule 46.) He so instructed Dunmore (R. 208, under Rule 46) and Lowell, and even assisted Lowell in the matter of one patent application (not one of the patents in suit) by having his own attorney make a search. (R. 210, under Rule 46.) Defendant's Exhibits J to EEE under Rule 46 (physical exhibits) include more than thirty patents taken out by Bureau of Standards employees in the main prior to the application for the patents in suit. Employees of the Bureau may be presumed to have known that the Government was not engaged in the manufacture and sale of apparatus involving their inventions, and that the Government needs would be satisfied by the free use of the inventions. There was certainly no reason for them to believe that the Government would not want household radio receivers to be generally used.

Moreover, the Government introduced in evidence a memorandum of instructions to the members of the Radio Section entitled "Information for Members of the Radio Laboratory" (Plaintiff's Exhibit 13, R. II, p. 45.) This is a comprehensive document, prepared for the instruction and

guidance of the members of the Radio Section. It was distributed to the members of the Section on or about July 16, 1920. (Dellinger, R. 40, 41.) At this time Kolster and Dellinger were the chiefs of the two divisions of the Radio Section. The plaintiff introduced this document in evidence for the purpose of showing that the instructions therein contained constituted Bureau of Standards regulations. It is clearly the kind of document in which the statement that any requirement or policy of the Bureau of Standards to the effect that employees must abandon the whole product of their inventive faculties to the Government might be expected to be included. It contains, however, no hint of such a suggestion, which is, of course, to be expected as the testimony is clear that such was not the policy of the Bureau of Standards, but, on the contrary, that the employees were encouraged to patent their own inventions, subject to a license or shop right in the Government for whatever purposes the Government might have use for the invention.

It is hardly necessary to remark that when facts are relied upon as giving rise to a contract which a court is asked to enforce, they must present a situation in which it can be justly said that there was a meeting of the minds of the parties. The minds of the employees for the purpose of contracting are as important as that of the employer. Thus a situation must be shown in which it can be said that the circumstances from the point of view of the employees were such that reasonable men in such circumstances would have understood that they were agreeing to contract away their entire patent rights in any future inventions which they might make.

In an attempt to meet the absence of any agreement, written or oral, on the part of the employees, to transfer

to their employer the title to their inventions, the Government at the trial of the case took the position that the superiors of these employees had assigned to them the very task of making the specific inventions embraced in the patents in suit. It was to this end that nearly all of the evidence offered by the Government was directed, with the thought that the acceptance of such an assignment was the equivalent of an agreement to surrender the inventions if they should be successful in making them. An examination of the bills of complaint indicates that this is the sole theory upon which the bills were brought. (Statement of Facts, supra, p. 14.) Failing to sustain by proof the averments of the bills of complaint, the contention of the Government was broadened to the extent of claiming that the patents were in equity its full and exclusive property, regardless of any direction to the employees to undertake the inventions covered by the patents. The position now taken is that even if the inventions in suit were not assigned to the employees to be made, they were "offshoots" of other assignments [1] (petitioner's brief, note page 6), but that in any event the partial employment of the inventors in matters that involved technical research of itself constitutes a contract to transfer patents.

This argument was made to the Trial Judge, who disposed of it in the following manner (R. 228):

> "If the bill is to be sustained, resort must be had to the further position taken by the United States that when an employee of the radio section, one of whose duties is to carry on research work, makes an invention within the field of his work, though without assignment

[1] The evidence and the findings of both Courts below are clear that the inventions were unconnected with any task assigned to the inventors.

from a superior, such an invention ipso facto becomes the property of the employer; or, stated differently, that all patents of research workers in the radio section of the Bureau of Standards belongs to the United States. I am confident that no provision in the organic law creating the bureau or in acts of Congress making appropriations to carry on its work, no well-considered authority or sound reason can be found to support such a position.

"The basis of the foregoing position, repeatedly emphasized both in argument and brief, seems to be the assumption that the research work of the Bureau of Standards is primarily concerned with invention. But there is nothing in the record to support this idea. While it is true that § 2 of the act creating the bureau speaks of the 'solution of problems which arise in connection with standards' and some of the appropriation acts refer to 'investigation and standardization of methods and instruments employed in radio communication,' these statutory provisions fall far short of converting the work of the bureau or any section thereof into 'inventive' work, as that word is usually understood. Had Congress any such intention it ought to be expressed in the clearest and plainest words and should not be left to uncertain implications from duties and conduct. The bureau was at times engaged in 'research work.' 'Research' has been defined as the 'endeavor to discover, to develop, and to verify knowledge', and 'careful or critical inquiry or examination in seeking facts or principles.' While invention may and usually does presuppose research, research certainly does not usually involve or result in invention. To say that a person engaged in 'research' work is necessarily engaged in 'inventive work' is putting an unwarranted construction upon the word 'research', not justified by common knowledge or experience.

"Half the time of Dunmore and Lowell was occupied in testing work. The other half of their time was

occupied in research work, normally invoking their skill, knowledge, and experience. By exercising those faculties within the field of work assigned to them these employees fully performed the duties owing to their employer. For an employee to go beyond such skill, invoke his inventive genius, and make a patentable invention is the unusual and abnormal thing not incident to his general employment.

"The Bureau of Standards has upon its staff a large number of employees engaged in specific fields of activity and to a certain extent engaged in research work. To hold that every invention made by one of these research workers under the facts disclosed in this case automatically became the property of the United States would, I think, be not only contrary to the law as laid down by the Supreme Court, but have a strong tendency to destroy the morale of the bureau and take away a just incentive on the part of its employees to make inventions, that is, a personal reward for their efforts, bearing always in mind that the Government is entitled to the full use of all such inventions."

The decisions in this court amply sustain the conclusion of the trial judge.

In *Hapgood v. Hewitt*, 119 U. S. 226, a demurrer was interposed to a bill in equity designed to compel the assignment of a patent issued to an employee. The averments of the bill which were recited at length by the court were thus equivalent to proven facts. Hewitt was employed as superintendent of the employer's mill. The Court summarized the averments of the bill in the following manner:

"The duties of the superintendent were to have general charge of the manufacturing department subject to the discretion of the president, and to devise and to get up such new devices, arrangements, and improve-

ments in the ploughs manufactured as should adapt them to the market and as should be needed from time to time to suit the wants of customers."

As an inducement to obtain the position Hewitt represented that

> "He was a man of large experience in mechanical pursuits; that he had been for several years immediately preceding engaged with Avery & Sons, plough manufacturers in Louisville, and had been since 1868 familiar with the manufacturing of ploughs and agricultural implements; that he had been instrumental in devising and getting up the best ploughs manufactured by Avery & Sons; . . . that he could and would give to any manufacturer who should secure his services the benefit of his experience in devising and making improvements in the ploughs manufactured. In consequence of these representations and relying upon them the corporation employed Hewitt to devote his time and services to getting up, improving, and perfecting ploughs and other goods . . . It was agreed between Hewitt and the corporation, that, from that date, Hewitt should fill the position of superintendent of the manufacturing department, and as such, not only exercise a general supervision over that department, subject to the president, but also devote his time and services to devising improvements in, and getting up and perfecting, ploughs adapted to the general trade of the corporation. . . ."

During the employment the President of the corporation thought it desirable to change a plough with a wooden sulky then being manufactured into one having an iron sulky, which also involved other changes and improvements. Hewitt was directed to devote his attention to this.

> "In accordance with those directions, Hewitt devised and constructed a sulky plough of wrought and

malleable iron, and, after some delays, about the 1st of April, 1877, produced a plough satisfactory to the president. During all the time that he was engaged in devising and constructing the new plough, he was in the employ of the corporation, and drawing a salary of $3,000 a year. The time during which he was so engaged was the regular working hours in the factory. The men who did the manual labor on the new plough were all employes of, and paid by, the corporation; and all the materials used in its construction were bought and paid for by the corporation."

"The bill also alleges that, in devising and constructing the plough, Hewitt was only performing his duty as an employe of the corporation, and carrying out his contract with it; that he was only what he was hired and paid to do; that the result of his labors belonged to the corporation; that it became, in equity and good conscience, the true and rightful owner of the right to manufacture the plough; that, if there is any part thereof which is patentable, the patent belonged to the corporation as equitable assignee of Hewitt; and that he was and is bound, in equity and good conscience, to make an assignment of the patent. . . ."

This Court, in disposing of the contention that the above stated facts warranted a decree against Hewitt for the assignment of the patent, held that the contract, as stated in the bill, contained nothing

"as to any agreement between the corporation and Hewitt, that the former was to have the title to his inventions or to any patent that he might obtain for them. . . . It is not averred that anything passed between the parties as to a patent. We are not referred to any case which sustains the view, that, on such facts as are alleged in the bill, the title to the invention or to a patent for it passed."

The Government's brief mentions this case and dismisses it with the statement that the "demurrer to the bill

was sustained on the ground that the allegations of the bill were not sufficient to establish that the contract of employment required the employee to exercise his inventive faculties." This is hardly a proper analysis of the decision. The bill is replete with averments which, upon the demurrer, were taken as true, that Hewitt *was* employed to exercise his inventive faculties in devising improvements from time to time upon his employer's ploughs. This employment necessarily involved research. It is the reverse situation to that described by the trial Court ("While invention may and usually does presuppose research, research certainly does not usually result in invention"). Thus the decision in Hapgood v. Hewitt is that a technical employment which carries with it a general duty to devise improvements where this is possible, does not amount to an undertaking by the employee that he will assign any patents which may be issued for these to his employer. The case is thus much stronger than the case at bar.

Dalzell v. Dueber Watch Case Mfg. Co., 149 U. S. 315, was a case in which a former employee of the Dueber Co. sued it for the infringement of patents covering inventions made during his employment. The employer pleaded an agreement to assign the patents and filed a cross-bill asking for the specific performance of this agreement. It was upon the cross-bill that the case was principally considered in this court. It averred an employment of Dalzell whereunder Dalzell had the duty "of making and devising tools to be used in the construction of watch cases"; that Dalzell's salary was raised on his representation to the plaintiff "that in the future his services would be of great value in devising and perfecting of such tools" and that, thereafter, wholly at the plaintiff's expense, Dalzell continued "to devise and

to construct various tools to be used in the orator's watch-case factory in the manufacture of various parts of watch cases." The cross-bill further averred that plaintiff had borne the expense of prosecuting Dalzell's patent applications, upon his representation to the plaintiff that "such letters patent might be taken for the benefit" of the plaintiff, and that "Dalzell did not ask or require any further or other consideration for said inventions and such letters patent as might be granted thereon, which proposition was then and there accepted."

There was much controversy in the testimony of the respective parties regarding the allegations of the cross-bill and a specific denial by Dalzell that he had ever made any agreement to assign inventions or patents obtained thereon. There was no controversy, however, regarding Dalzell's duties "to device and to construct various tools to be used in the orator's watch-case factory in the manufacture of various parts of watch cases."

The Court (Mr. Justice Gray), after recognizing the fact that an agreement on the part of an employee to assign his patents to his employer, even though oral, was valid, held that the facts of the case did not permit of the finding that such a contract had been made, saying:

> "But a manufacturing corporation, which has employed a skilled workman, for a stated compensation, to take charge of its works, and to devote his time and services to devising and making improvements in articles there manufactured, is not entitled to a conveyance of patents obtained for inventions made by him while so employed, in the absence of express agreement to that effect."

The Dueber Company's bill for the assignment of the patents was accordingly dismissed.

In *Dalzell v. Dueber Mfg. Co.* there was an employment with a general duty to "devise and to construct various tools to be used in the orator's watch case factory." This employment, without more, was held to be insufficient to imply a contract to assign patents. The facts of this case also are stronger than those of the case at bar. They present a situation which necessarily called for study and research prior to the inventive acts.

The case of *Standard Parts Co. v. Peck*, 264 U. S. 52, presents a wholly different situation. This was a case which dealt with a contract of employment whereby the employee was engaged for the sole and specific purpose of accomplishing a designated invention. This court held that the undoubted intention of the contracting parties was that the invention, if made, should become the property of the employer. The employer in that case desired a machine which would enable it to manufacture a front spring for the Ford automobile at a price lower than competitors could produce it. It was clearly the intention of the parties that if the special employee hired for this purpose should succeed in accomplishing it, the employer was to be protected against licenses of the economical machine by the employee to its competitors. No reasonable person in the employee's situation when the contract was made could, in view of the special circumstances, have doubted that the employer wanted the machine for his own exclusive use.

We feel it unnecessary to refer to the many cases which have followed the reasoning of *Hapgood v. Hewitt, supra,* and *Dalzell v. Dueber Mfg. Co., supra.* One case, decided by Judge Gray, in the Third Circuit Court of Appeals, does however, deserve mention, if for no other reason than that fifteen years after it was decided, the same court, in referring to it, said:

"That case has been followed in the great field of industrial and inventive activity in this circuit. It has made a workable and equitable patent relation between employer and employee, and we see no reason to depart from the principle therein laid down." (*Ingle v. Landis Tool Co.*, 272 Fed. 464.)

Hansen was employed by the predecessor of the Pressed Steel Car Co. as Chief Engineer. He testified that he had "charge of the engineering and mechanical departments of the Company's business" and that it fell within his duty to "improve or assist in improving the manufactured products." He further testified as follows regarding the scope of his inventive duties:

"Q. Did the matter of devising, designing cars, or parts thereof, come within the work of the engineering department?

A. Yes, sir; it did." (137 Fed. 416.)

The bill charged that the employment

"was upon the express understanding and agreement by him, that all designs, inventions and improvements that he might make or develop, while in your orator's employ, and all letters patent that might be obtained therefor, should become and be, the sole and exclusive property of your orator, and that for all such designs, inventions or improvements, if found or regarded as patentable he would from time to time, as he made or developed such designs, inventions or improvements, disclose the same to your orator's solicitor, and, through him, and at your orator's expense, make all necessary and proper applications for letters patent, and execute all necessary and proper papers to that end, and that he would, from time to time, as such applications were executed and filed, likewise execute and deliver to your orator, with such applications,

> properly executed assignments, of all such applications, inventions therein specified and letters patent that might be granted thereon and therefor . . ."

Hansen denied the existence of such an agreement but, as has been shown, he did not deny that the making of inventions and improvements was within the scope of his duty as the plaintiff's chief engineer. The patents in controversy in the case embodied inventions made by Hansen while in the employ of the Company.

The opinion considered in great detail the decision in *Hapgood v. Hewitt, supra,* and the effect of the admitted facts which, through the demurrer, that case presented. The conclusion of the court was that

> "The decision in the Hapgood Case was, in effect, that the relation of employer and employe, in connection with the facts of an undertaking by the latter to give his time and effort, as general manager, to the devising of improvements in the articles manufactured under his supervision, the subsequent raising of his salary, the decreasing of his general duties of supervision, in order that he might devote himself to the devising of such improvements, that he was specially requested to devote himself to the construction of an improved plow—the subject of the controversy—that the device in question was developed during the working hours, for which defendant was paid, that he had the assistance of other employes of complainant, and that all expenses for materials and models were paid by complainant, was not such that the equitable title in such invention, and the patent therefor, was in the employer, or that the employe, under the circumstances, should be compelled, in equity and good conscience, to assign the absolute title and property in the same, to his employer."

"The decisions of the Supreme and Circuit Courts in this case (Hapgood v. Hewitt) commend themselves the more strongly, that neither court has ignored what we may term the reasonable rights of the employer in such cases, but merely denied to him the right to take to himself the entire property and monopoly of defendant's invention, in the absence of express contract therefor. We think, reason, as well as authority of this decision, requires a similar conclusion in the case at bar. We do not think that the complainant here, in the absence of express contract to that effect, from the mere relation of employer and employe, in connection with the facts and circumstances disclosed by this record, is entitled, in equity and good conscience, to an assignment from the defendant of his whole right, title and property in the inventions in question. If entitled to anything complainant is only entitled to a shop right or license that would enable it to use these inventions without paying a royalty therefor, a right which does not strip defendant of his entire property right in the product of his own inventive faculty. It is by distinguishing between claims for mere shop rights or license, and claims for the entire and exclusive property right in the inventions of the employe, that the cases cited are to be profitably read."

The following comment is found in the Government's brief at page 25 regarding *Pressed Steel Car Co. v. Hansen:*

"That case is based on a narrow interpretation of the Solomons case—the very interpretation which this court repudiated in Standard Parts case."

It is submitted that this is not a permissible statement to make regarding the *Hansen* case. It is true that in interpreting Mr. Justice Brewer's language in the Solomons case, Judge Gray concluded that the word "property"

("that which he has been employed and paid to accomplish, becomes, when accomplished, the property of his employer") meant the employer's right to use the invention and that this court, in the *Standard Parts* case interpreted "property" as the exclusive ownership. Judge Gray, however, expressly refused to rest his decision upon this theory and conceded, for the purpose of the decision, that the property referred to by Mr. Justice Brewer was the exclusive ownership. Here again we have a leading case in which the devising and designing of cars came within the scope of the employee's duties, in which it was held that in the absence of an agreement to surrender his patents, the contract of employment, in these circumstances, did not entitle the employer to the assignment of the patent.

The remarks of the Third Circuit Court of Appeals in *Ingle v. Landis Tool Company*, quoted at page 35, *supra*, commenting on the workability of the rule laid down by Judge Gray in *Pressed Steel Car Company v. Hansen*, *supra*, and of its beneficial effect in settling this important question in the highly industrialized field embraced in the Third Circuit, are worthy of mention in connection with the cases of *Hapgood v. Hewitt*, *supra*, and *Dalzell v. Dueber Mfg. Co.*, *supra*, decided in this Court. These cases have established a rule of law upon the faith of which employers and employees have acted throughout the entire country for a long period of years. Many patents have been obtained by employees of private industry and by employees of the Government which have been assigned to commercial interests which would be very seriously affected by a disturbance of the rule announced in those cases. It is indispensable to the due administration of justice, especially by a court of last resort, that a question once deliberately examined and decided, should be considered as settled and

closed. Judicial decisions may fairly be presumed to have entered into the business transactions of the country. It has always been recognized in such a situation that the principle of *stare decisis* requires adherence to decisions upon the faith of which important action has been taken.

Courts, in seeking to arrive at the correct scope of contracts between employers and employees involving the transfer of rights in future inventions of employees, have, to a considerable extent, been guided by the needs of the employer with respect both to title and to the non-exclusive right to use. Thus, Judge Acheson, in *Hildreth v. Duff*, 143 Fed. 139, in interpreting the contract in that case, gave weight to the fact that the employer was a candy manufacturer and not a seller of candy manufacturing machines, and concluded that the agreement was intended to cover the right to use the employee's patented improvement to machinery, but was not intended to cover the exclusive ownership. A similar conclusion was reached by Judge Shepley, in *Whiting v. Graves*, 3 Ban. & A. 222; 29 Fed. Cas. 1059. The opposite conclusion was reached by Judge Lurton, in *Withington-Cooley Mfg. Co. v. Kinney*, 68 Fed. 500, where the exclusive ownership and not the use was the employer's need.

The force of these decisions and their application to the present situation is particularly apparent when the Organic Act creating the Bureau of Standards and the subsequent acts of Congress which have affected the Bureau are considered. The functions of the Bureau of Standards are outlined in the organic act:

> "The functions of the Bureau shall consist in the custody of standards; the comparison of standards used in scientific investigations, engineering, manufacturing, commerce and educational institutions with

> the standards adopted or recognized by the Government; the construction when necessary of standards, their multiples and subdivisions; the solution of problems which arise in connection with standards; the determination of physical constants and the properties of materials when such data are of great importance to scientific or manufacturing interests and not to be obtained of sufficient accuracy elsewhere."

(March 3, 1901, c. 872, Sec. 2, 31 Stat. 149, 15 U. S. C. A., Sec. 272.)

Here there is no suggestion of the grant of authority to conduct any research that is not connected with the adoption or maintenance of standards. During the period in question annual appropriation acts were passed allowing various departments of the Government to transfer funds which had been appropriated for their use to the Bureau of Standards so that the Bureau of Standards could conduct the desired work. These acts contain the limitation that the transfer of the appropriation be made for work within the scope of the functions of the Bureau (41 Stat. 682).[1]

These transfer appropriation acts can, therefore, in no way have the effect of enlarging the functions of the Bureau of Standards as defined in the Organic Act. It was under the authority of one of these transfer of appropriation acts that the money was made available to the Bureau of Standards for the projects for the Air Service, among which was the design of an airplane relay upon which Dunmore worked.

These inventors had no reason to suppose that title to their inventions would be desired by the Bureau. Without a clear and unmistakable declaration from Congress au-

[1] For the text of this Act see Petitioner's Brief, pp. 42-43.

thorizing the Bureau of Standards to purchase or acquire *exclusive* rights in an invention no authority to do so should be inferred from this legislation since such rights are not necessary to the complete functioning of the Bureau and do not benefit the Bureau in any way. This is particularly true in such a case as the present one where the effect of such an inference would be to deprive citizens of their property without ensuing benefit to the Government. Not only has Congress failed to make such a declaration but the legislation it has made, as will be shown, distinctly recognizes the rights of Government employees to obtain patents.

An examination of the record of this case fails to disclose any facts which afford any reasonable basis upon which a contract to assign these patents can be implied. Such facts as do appear, have, as has been shown, been held by the authorities not to raise such a contract. It is submitted that in this case there is no contract to enforce. It seems wholly unnecessary, therefore, to refer to the caution of Mr. Justice Washington in *Colson v. Thompson*, 2 Wheat. 336, 341, (mentioned by Mr. Justice Gray, in *Dalzell v. Dueber Mfg. Co., supra*).

> "The contract which is sought to be specifically executed ought not only to be proved, but the terms of it should be so precise as that neither party could reasonably misunderstand them. If the contract be vague or uncertain, or the evidence to establish it be insufficient, a court of equity will not exercise its extraordinary jurisdiction to enforce it, . . ."

II. THE EQUITIES.

This court, in *Dalzell v. Dueber Mfg. Co.*, 149 U. S. 315, in considering the equities in that case, said:

> "From the time of Lord Hardwicke it has been the established rule that a court of chancery will not decree specific performance unless the agreement is 'certain, fair and just in all its parts.' "

In discussing the contract asserted in that case, Mr. Justice Gray said:

> "It may well be doubted whether, if such a contract were satisfactorily proved to have been made, a court of equity could not consider it too unconscionable a one between employer and employee to be specifically enforced in favor of the former against the latter."

This language was used with reference to the very slight consideration which the employee in that case received in return for the alleged agreement under which it was claimed that the patents belonged to the employer. The language of Mr. Justice Bradley, in *Aspinwall Co. v. Gill*, 32 Fed. 697, shows the disfavor with which courts of equity look upon an attempted wholesale appropriation of an employee's inventive faculties by an employer:

> "A naked assignment or agreement to assign in gross, a man's future labors as an author or inventor,—in other words, a mortgage on a man's brain, to bind all its future products,—does not address itself favorably to our consideration."

See also *Westinghouse Air-Brake Co. v. Chicago Brake & Mfg. Co.*, 85 Fed. 786.

The record (p. 221) shows the extremely small salaries which these inventors were receiving at the time when the inventions were made, after many years' service in the Bu-

reau of Standards. It further shows that for years they carried on a difficult and expensive interference proceeding and that the Government although it had full knowledge of the pendency of the proceedings, permitted them to bear the burden of establishing the priority of their inventions in proceedings adjudicated favorably to the inventors by the Examiner of Interferences and the Board of Appeals of the United States Patent Office and now pending under R. S. 4915 in the Supreme Court of the District of Columbia, Equity cases 53937 and 53938. The fact of the Government's notice and non-intervention was stipulated of record (R. 154). This fact cannot but have an effect upon the equities of the case. We are not here concerned with contentions to the effect that the Government may not be convicted of laches, but rather with a factor which bears upon the equities in these bills to the same extent as though the plaintiff were a private litigant. The inventors at considerable expense, built and demonstrated alternating current operated radio receiving sets (R. II, 436-437), to interest various persons in the invention (R. 154). This defendant has advertised its products under the patents at considerable expense (R. 198, 199). The Government appears frankly to have taken the position that the inventors and their exclusive licensee were to be encouraged to ruin themselves financially in order to establish a valuable right which the Government at the proper time intended to claim. To urge that such an attitude is so inequitable as to shock the conscience of a chancellor does not in the least involve the question of whether estoppel or laches may be pleaded against the Government. It does, however, reflect upon its equitable standing as a plaintiff in a suit for the specific performance of the contracts which it here asserts and seeks to have enforced.

III. THE GOVERNMENT'S ARGUMENT OF PUBLIC POLICY.

There are two answers to the argument made in this case to the effect that a governmental policy requires the surrender of the patents to the United States. In the first place, the decisions are clear that the United States as an employer stands in no different position than does any other employer. As was said by Mr. Justice Brewer in *Solomons v. United States*, 137 U. S. 342,

> "The Government has no more power to appropriate a man's property invested in a patent than it has to take his property invested in real estate; nor does the mere fact that an inventor is at the time of his invention in the employ of the Government transfer to it any title to, or interest in it. An employee performing all the duties assigned to him in his department of service may exercise his inventive faculties in any direction he chooses, with the assurance that whatever invention he may thus conceive and perfect is his individual property. There is no difference between the Government and any other employer in this respect."

This statement was approved in this Court in Gill v. United States, 160 U. S. 435, and has been followed in many other cases.

In the second place, the patent policy of the United States, as evidenced by Congressional legislation, is clearly at variance with the view taken by the Government in this case. In 1883 Congress passed an Act (22 Stat. 625) which provided that a Government employee had the privilege of taking out a patent for any invention made by him which is used or to be used in the public service without the payment of any fee on condition that the application state that the invention described therein "may be used by the Gov-

ernment or any of its officers or employees in prosecution of work for the Government or by any other person in the United States without the payment to him of any royalty thereon."

Although the Act of April 30, 1928, c. 460, 45 Stat. 467, 468, was not in force at the time when the inventions covered by the patents in suit were made, this Act completely destroys the argument of policy which is made in the present case. The policy of the United States upon the question of the grant of patents to its employees is there clearly stated and leaves no room for an argument which would seek to withhold its provisions from applicability in the case of employees of the Bureau of Standards.

> "The Commissioner of Patents is authorized to grant, subject to existing law, to any officer, enlisted man, or employee of the Government, except officers and employees of the Patent Office, a patent for any invention of the classes mentioned in section 4886 of the Revised Statutes, without the payment of any fee when the head of the department or independent bureau certifies such invention is used or liable to be used in the public interest: *Provided,* That the applicant in his application shall state that the invention described therein, if patented, may be manufactured and used by or for the Government for governmental purposes without the payment to him of any royalty thereon, which stipulation shall be included in the patent."

CONCLUSION.

It is submitted that the decision of the Circuit Court of Appeals for the Third Circuit should be affirmed.

Respectfully submitted,

JAMES H. HUGHES, JR.,
E. ENNALLS BERL,
Solicitors for Respondent.

WARD & GRAY,
JOHN B. BRADY,
Of Counsel.